



GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Medium-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title:	Piloting Innovative Investments for Sustainable Landscapes		
Country(ies):	Global	GEF Project ID: ¹	9719
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01545
Other Executing Partner(s):	The Sustainable Trade Initiative (IDH)	Submission Date:	January 13, 2017
GEF Focal Area(s):	Land Degradation	Project Duration (Months)	36
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>		Corporate Program: SGP <input type="checkbox"/>
Name of parent program:		Agency Fee (\$)	190,000

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	(in \$)	
		GEF Project Financing	Co-financing
LD-3 Program 4	GEFTF	2,000,000	52,000,000
Total Project Cost		2,000,000	52,000,000

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

Project Objective: To maintain or increase forest cover, intensify agricultural production, and improve the livelihoods of smallholders through piloting de-risking finance for investments in sustainable landscapes in seven target landscapes in Brazil, Indonesia and Liberia.

Project Components	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Co-financing
Derisking Commercial Financing of Deforestation-free land-use	Investment	<i>Private finance leveraged on a 2:1 ratio as a result of the public, derisking funding provided by the Production, Protection and Inclusion Fund in the seven landscapes (across 3 countries: Indonesia, Liberia and Brazil)</i>	1.1 22 million US\$ invested as derisking production in exchange for a protection plan through Production Protection Inclusion Fund 1.2 Investment Pipeline Developed to create proof-of-concept on solutions contributing to Green Growth targets established under NICFI-IDH Partnership Program and PPI deals signed under 2.1 1.3 Financial leverage created by fundraising from climate funders, mainstream finance institutions and development finance institutions 1.4 A system for monitoring the impact performance created (Satellite imagery, field inspections, interviews, reports) in order to verify and track conservation performance	GEFTF	2,000,000	52,000,000
Subtotal					2,000,000	52,000,000

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#).

³ Financing type can be either investment or technical assistance.

Project Management Cost (PMC) ⁴	GEFTF	0	0
Total Project Cost		2,000,000	52,000,000

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: (N/A)

C. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Donor agency	Norway (NICFI)	Grant ⁵	22,000,000
Donor agency	Norway (NICFI)	Grant ⁶	30,000,000
Total Co-financing			52,000,000

D. INDICATIVE TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES) AND THE PROGRAMMING OF FUNDS^{a)}

GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
UNEP	GEFTF	Global	Land Degradation	Non-Grant	2,000,000	190,000	2,190,000
Total GEF Resources					2,000,000	190,000	2,190,000

a) Refer to the [Fee Policy for GEF Partner Agencies](#).

E. PROJECT PREPARATION GRANT (PPG)⁷

Is Project Preparation Grant requested? Yes No If no, skip item E.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS

Project Preparation Grant amount requested: \$50,000					PPG Agency Fee: \$4,750		
GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁸ (b)	Total c = a + b
UNEP	GEFTF	Global	Land Degradation	Non-Grant	50,000	4,750	54,750
Total PPG Amount					50,000	4,750	54,750

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁹

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	84,000 Hectares
3. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO ₂ e mitigated (include both direct and indirect)	222,600 tCO ₂ e ¹⁰

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

⁵ The US\$22 million grant component will be the contribution of NICFI to the PP fund.

⁶ The US\$ 30 million grant component will fund the convening activities of the NICFI-IDH Partnership Program which described in the baseline section

⁷ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to \$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

⁸ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

⁹ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF.

¹⁰ Sustainable cropland management technologies has mitigation potential in the range of 0.53-1.14 tCO₂e/ha/yr in moist climate zone (IPCC, Climate Change 2007: Mitigation Contribution of Working Group III to the Fourth Assessment Report of the IPCC Chapter 8- Agriculture). The lower boundary value (0.53 tCO₂e/ha/yr) was used for the mitigation potential estimation for 5 years period. The target will be reviewed with the Carbon Benefits Project greenhouse gas inventory toolkit during the PPG phase.

PART II: PROJECT JUSTIFICATION

1. *Project Description.* Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area¹¹ strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

1.1 THE GLOBAL ENVIRONMENTAL PROBLEMS, ROOT CAUSES AND BARRIERS THAT NEED TO BE ADDRESSED

Environmental Problems

Forests are a vital natural resource, covering approximately 31% of global land surface¹² and storing at least 289 gigatonnes of carbon.¹³ More than 1.5 billion people depend directly on forest for their livelihoods, but about 7.6 million ha of tropical forest are lost every year. Tropical deforestation is one of the biggest challenges of our times, as it threatens the biodiversity of the planet and is a major contributor to carbon emissions. Deforestation leads to land degradation which is a major factor in the progressive deterioration of ecosystem services affecting agro-ecosystems and forest landscapes globally. The loss of forest, and the accompanying loss of ecosystems and the services they provide, threatens the security and livelihoods of local communities, reduces access to clean water, decreases soil productivity and accounts for 12 percent of global greenhouse gas emissions. In recent years, it has become apparent that the most significant threat to the world's remaining forests is conversion for commercial agriculture and other non-forest use. Agriculture alone accounts for over 70 percent of all deforestation across tropical and sub-tropical countries (Hosonuma et.al., 2012), but with differences in geographic distribution of the importance of commercial versus subsistence agriculture (Kissinger et.al, 2012). Commercial actors play a larger and increasing role in the expansion of agriculture into forests and for many countries commercial agriculture is dominant over subsistence agriculture (Boucher et al. 2011). Agribusinesses, increasingly producing for international markets (cattle ranching, soybean farming and oil palm plantations) were identified as main drivers of post-1990 deforestation (Rudel et al., 2009; Boucher et al., 2011). Many of the environmental benefits of intact forest are unpriced 'externalities', resulting in the market mispricing natural forest assets. By converting forest to land and then producing tradeable commodities that the market can price, land users are able to take advantage of this perceived arbitrage opportunity. Anticipated global economic growth and changing diets will strengthen the demand for agricultural commodities and place additional pressure on forests in the foreseeable future, meaning that the pressure will get even bigger than it is today without a changing paradigm how land is managed and agricultural commodities are produced. The challenge is to develop business models that can manage sustainable commodity production while also maintaining forest and forest ecosystem services.

Until recently, forest protection and agricultural development were two separate worlds. Forests were the world of government, NGOs and public (climate) finance, while agriculture expansion and growth was the world of banks, business and development finance. Fortunately, this is rapidly changing. A growing number of industries and individual companies acknowledge that diminishing exposure to deforestation and other material risks is in their collective self-interest and requires them to reduce environmental damage.¹⁴ Pledges such as "Zero-net deforestation pledge" and "Zero deforestation pledge" ¹⁵ are increasingly adopted at industry-level to stimulate sector peers to take action as well. The Consumer Goods Forum—an association of over 400 large retailers, manufacturers, and service providers across 70 countries with combined sales of around US\$3 trillion—recommends that its members adopt a policy of "zero net deforestation" in their supply chains by 2020.¹⁶

The project will be targeting seven landscapes in Brazil, Indonesia and Liberia namely Brazil: (i) The State of Mato Grosso; Indonesia: (ii) South Sumatra and Jambi, (iii) West Kalimantan and (iv) Aceh; Liberia: (v) The South East Landscape, (vi) The Western Landscape and (vii) The Nimba Landscape. Actual investments will take place into specific projects within those landscapes. More detailed information is provided in Annex 2 on the target landscapes.

¹¹ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

¹² Food and Agriculture Organization of the United Nations. *State of the World's Forest 2012*. [FAO State of the World's Forest] Rome, 2012. <http://www.fao.org/docrep/016/i3010e/i3010e.pdf>

¹³ Food and Agriculture Organization of the United Nations. *Global Forest Resources Assessment 2010: Main Report*. [FAO Global FRA] Rome, 2010. <http://www.fao.org/docrep/013/i1757e/i1757e.pdf>

¹⁴ WRI and UNEP FI (2015). Carbon Asset Risk: Discussion Framework. WRI and UNEP-FI Portfolio Carbon Initiative.

¹⁵ Zero-net deforestation pledge allows companies to offset the impacts of their practices on forests by replanting the deforested areas that can largely maintain forest 'quantity, quality and carbon density' in order to have an overall zero-net effect on deforestation. Zero deforestation pledge commits companies to completely remove deforestation from their supply chains.

¹⁶ UNEP (2016). UNEP Frontiers 2016 Report: Emerging Issues of Environmental Concern. United Nations Environment Programme, Nairobi

Brazil holds about one-third of the world's remaining rainforests, including a majority of the Amazon rainforest. Terrestrially speaking, it is also the most biodiverse country on Earth, with more than 56,000 described species of plants, 1,700 species of birds, 695 amphibians, 578 mammals, and 651 reptiles. Amazon basin has experienced an exceptional extent of forest loss over the past two generations—an area exceeding 760,000 square kilometers, or about 19 percent of its total surface area of 4,005,082 square kilometers, has been cleared in the Amazon since 1970. According to the latest report of the Deforestation Alert System (SAD), 99 square kilometers of deforestation were detected in the Brazilian Amazon in November 2015 which shows that deforestation is continuing in Brazil. Deforestation was concentrated in four states within Amazon Basin: Mato Grosso (33%), Pará (24%), Rondônia (19%) and Amazonas (19)¹⁷. Mato Grosso was responsible for 33% of deforestation in the Legal Amazon.

Indonesia is endowed with some of the most extensive and biologically diverse tropical forests in the world. Millions of Indonesians' livelihood depend on forests. The forests houses a rich flora and fauna biodiversity. Even today, almost every ecological expedition that sets out to explore Indonesia's tropical forests returns with discoveries of new species. The primary forest cover loss for the period 2000-2012 is about 6.02 Mha¹⁸. Annual primary forest cover loss increased over this period.¹⁹ Proportional loss of primary forests in wetland landforms increased and almost all clearing of primary forests occurred within degraded types²⁰, meaning logging preceded conversion processes. Indonesia has 12,477 million metric tons of carbon stocks in living forest biomass. According to FAO data, 61.6% of GHG emissions in Indonesia came from land-use change and forestry in 2011.²¹

Liberia contains tropical rainforest which covers about 4.32 million hectares and accounts for approximately 45 percent of the land area. The majority of Liberia's forest cover is found in two blocks - northwest (semi-deciduous forest) and southeast (evergreen forest). Moreover, Liberia is situated in the fragmented band of forest known as the "Upper Guinean Forest" which is one of the two most significant forest blocks in Africa, the other being the "Congolese Forest".²² Between 1980 and 2005, forest area has been reported as being reduced by 22% (FAO, 2005), suggesting an average annual rate of deforestation of 0.9%. A 2008 forest change analysis in Liberia performed by a partnership between the Forestry Development Authority (FDA), Conservation International and South Dakota State University (SDSU) suggests the average deforestation rate increased from 0.2% in 1986-2000 (Christie et al. 2007) to 0.35% in 2000-2006 (R-Pin, 2008).²³ According to FAO, reforestation rate in Liberia was only 30 kha/year in 2010. The forestry sector contributed US\$ 159.7 million to the economy in 2011, which is approximately 15.2% of the GDP²⁴. According to FAO data, 89.8% of GHG emissions in this country came from land-use change and forestry in 2011. Liberia has 583 million metric tons of carbon stocks in living forest biomass.

Barriers:

The long term solution for addressing the continuance loss of forest due to agro-commodities production in the seven target landscapes is to transform the finance and business models in mainstream markets, such that they sustain land-use practices in which the increased production of agro-commodities contributes to the protection of forests and the inclusion of smallholders and forest communities in the economy for a long period of time. This is called Produce, Protect and Include – PPI land use. However, a number of barriers prevent the enactment of this vision.

Barrier 1: Absence of a conducive (regulatory) environment for PPI land use to be upscaled: In order to attract increased levels of responsible foreign direct investment to support emission reduction goals and forest coverage goals, there is a clear need for the different sectors and government departments to come up with a clear vision and road map on how to integrate increased production, protection of forest resources and inclusive management at a landscape level. The lack of proper land use planning does not directly cause land use conflicts, but it contributes to an environment in which land use practices, land rights and future plans are not transparent, nor agreed upon, so they become highly contested. Although, local decision makers are aware of the environmental problems in their region, the available local or national financial resources do not act as an incentive for shifting to a more sustainable development path. To ensure uptake by different sectors/government departments, it is important to clearly articulate the expected job creation opportunities and tax benefits for regions if they follow such a path. Supportive conditions in policy and markets need to be created. This includes multi-stakeholders (supply chain companies, local governments, communities and civil society) to agree to a shared agenda for PPI, and to hold one another accountable. Further, to translate such a vision into reality, PPI partnerships is needed to be formed and the concepts proved to be viable. Central and local government need to improve enforcement and regulation to

¹⁷ Fonseca, A., Justino, M., Souza Jr., C. & Veríssimo, A. 2015. Deforestation report for the Brazilian Amazon (November 2015) SAD (p. 10). Belém: Imazon

¹⁸ Margono, Belinda Arunarwati, et al. "Primary forest cover loss in Indonesia over 2000-2012." Nature Climate Change 4.8 (2014): 730-735 and Hansen, Matthew C., et al. "High-resolution global maps of 21st-century forest cover change." Science 342.6160 (2013): 850-853.

¹⁹ Margono et.al

²⁰ The degraded primary forest class is a primary forest that has been fragmented or subjected to forest utilization, e.g. by selective logging or other human disturbances which have led to partial canopy loss and altered forest composition and structure (Margono et.al 2014).

²¹ Global Forest Watch (www.globalforestwatch.org)

²² USAID, Liberia Environmental Threats and Opportunities Assessment (ETOA) Final, United States Agency for International Development, Liberia, (2008).

²³ P. H. Shearman, An Assessment of Liberian Forest Area, Dynamics, FDA Concession Plans, and their Relevance to Revenue Projections.

²⁴ FAO, State of theWorld's Forests, 2014.

facilitate the uptake of potential private sector-financed Production Protection Inclusion agreements. Responsible investors have no incentive to reach out to local government if the regulatory and enforcement environment do not provide the necessary conditions to facilitate the uptake of such private sector finance. Sustainable land-use needs to be incentivized by the policy and stakeholder environment in which the companies operate. Sustainable land use is impossible to achieve without the commitment and endorsement from the local authorities in the landscape. There needs to be a basic level of public governance providing command-and-control protection of nature, land – and customary rights, spatial planning, smallholder support, and a general enabling environment. Service delivery models are the mechanisms or structures in which support services are channeled through a supply chain to improve performance and value creation. There is scant availability of these services in the targeted landscapes, or outside of those, on the combination between production and protection. This barrier will be addressed by the NICFI-IDH Partnership Program’s convening mechanism which is defined under baseline.

Barrier 2: Limited private sector funding for PPI and SLM: Many of the environmental benefits of intact forest are unpriced ‘externalities’, resulting in the market mispricing natural forest assets by effectively putting a value of \$0 on the broad range of forest ecosystem services such as climate, water and nutrient regulation, prevention of soil erosion, etc (except for timber and some non-wood forest products for which there are markets where these are priced). The market mispricing of many forest ecosystem services results in forests being converted to other forms of land use, and then producing tradable commodities (crops, mineral, metals, etc) that the market can price. Crucially, at present private sector investments remain focused on increasing commodity production through expansion of the existing production area into pristine (tropical) forests and the majority or the large banks lend to companies with high forest impacts. Investment in soft commodity production (incl. palm oil, soy and beef) by some estimates is US\$ 1.4 trillion and the annual value of trade in soft commodities is US\$ 135 billion – several orders of magnitude higher than (predominately public and private philanthropic) investment in forest protection (around US\$ 5.8 billion). Despite an increasingly broad public consensus about the need for action, there appears to be a disconnect between the urgency of the need to finance the transition towards a green and inclusive economy and ‘business as usual’ on the side of the institutional units making up the financial system (i.e., lenders, borrowers, and intermediaries). Because, private finance operates independently of intergovernmental processes and responds instead to real-time market signals, guided by the need to maximize expected return within existing policy and regulatory frameworks. Therefore, limited incentives on regulation and economics (including that initial deforestation can pay for the expenditure to plant new palm trees, the fact that land tenure is not clarified and hence there is no incentive to plant on existing degraded land, and agricultural intensification through various forms of inputs and training is costly) cause limited private sector funding for “Sustainable production”, which in this context means a lower impact on forests than the business-as-usual model. The most significant barrier to private capital flows in agricultural investments that have potential to protect forests and improve livelihoods of communities is that returns are often not proportionate with the level of perceived risks, which tends to be much higher than in more mature markets, given often weak regulatory frameworks and enabling environments. A dedicated funding mechanism needs to be established so as to demonstrate a financing model that achieves forest conservation in commercially productive landscapes: a different way in which land can be managed to addresses both the need to reduce food insecurity and improve agricultural production and value added (i.e. contribution to a country’s Gross Domestic Product) on the one hand, but at the same time adhere to Sustainable Development Goals, such as reducing degraded land, tackle climate change and reduce biodiversity loss. In practice this means making more effective use of existing agricultural land as well as (re)using degraded land – instead of continuing to fuel a business model that is based on converting (tropical) forests. There is not yet ready inclusive business cases which demonstrates the social and environmental impacts with proper financial planning. Since there is not any funding mechanism in mitigating risk and making risk-adjusted returns in line with investor requirements and as attractive as other markets, additional investors do not allocate capital to these emerging and frontier markets.

1.2) THE BASELINE SCENARIO AND ANY ASSOCIATED BASELINE PROJECTS

Both international supply chains and financial institutions (including banks, stock exchanges, asset owners and asset managers) are calling for forest conservation from their suppliers and clients respectively, adding further weight to its significance. International coalitions like the Consumer Goods Forum (CGF) and the Banking Environment Initiative (BEI) are examples of commitments from these actors toward addressing deforestation. International banks are paying more attention on environmental risks than they have in the past. They have formed sustainability teams which address these risks and then advise on lending practice within high-risk sectors, such as soy, palm oil, beef and forestry (pulp and paper). It is unclear, though, if these environmental risk policies by banks and investors have had any impact in the way they allocate capital to clients or investee companies and the indirect impact they are de-facto causing.

At the global scale, The GEF funded “**Commodities Integrated Approach**” (Commodities IAP) seeks to turn the sustainable production of key commodities from niche and specialized operations to the norm in each commodity sector. The Program’s overall objective is to reduce the global impacts of agriculture commodities on GHG emissions and biodiversity by meeting the growing demand of palm oil, soy and beef through supply that do not lead to deforestation and deforestation-related GHG emissions. The Theory of Change for the program builds on the premise that the increased adoption of agricultural commodity production practices that are less destructive of forests is contingent on several factors. Firstly, enabling conditions including policies and land use/spatial plans must be in place to make the right lands available for production and to make high biodiversity value and high carbon stock forests less accessible. Secondly, producers need enhanced capacity to adopt good

agricultural practices and improve yields. Thirdly, increased financial flows and economic incentives are necessary to support these good production practices in the right locations and less incentives must be provided in inappropriate locations. Fourthly, market awareness and demand for reduced deforestation supply are critical to promote more sustainable production. If these factors are addressed, agricultural production can be increased and growth achieved with sharp reductions in deforestation compared to business-as-usual scenarios. These three pilot countries (Brazil, Indonesia and Liberia) are also part of the Commodities IAP, and there is a significant opportunity for synergy during implementation. The GEF funding for the Commodities IAP, US\$ 40.3 million, is entirely grant-based, and does not make provision for de-risking or guarantees to incentivize private sector. UNEP, through UNEP-FI, will co-execute the “Enabling Transactions” child project together with IFC. UNEP will mainly lead (i) “support to financial markets & institutions” to increase funds (loans and investments) subjected to enhanced deforestation risk policies and (ii) “support to public sector” to increase public incentives and public and private financing for reduced deforestation practices. “Enabling Transactions” child project will develop business cases that highlight benefits of adopting zero deforestation supply chain approaches in financial decision making and build capacity of financial institutions in consideration of deforestation and forest degradation risks in agricultural investments. This proposed non-grant project will provide additional cases and best practices on innovative engagement of the private sector and public sector through innovative finance models that delivers protection and production benefits.

Global Forest Watch Commodities, an online platform, empowers companies to analyze the impact of key commodities on forests, using the latest and most powerful data available. GFW Commodities builds on the Global Forest Watch platform with a specific focus on companies who buy and sell major commodities that impact forests, such as palm oil, beef, soy, wood pulp. GFW Commodities is free to use and follows an open data approach in putting decision-relevant information.

Conservation International led **Conservation Agreements Private Partnership Platform (CAPPP)** seeks to forge mutually beneficial links between the private sector and local communities or landowners who commit to achieve biodiversity conservation, reduce land degradation, support climate regulation efforts, and promote sustainable natural resource management. Under a conservation agreement, local resource users agree to protect priority habitats in exchange for a steady stream of structured compensation from conservationists or other investors.

In October 2016, the **Tropical Landscapes Finance Facility** was launched in Jakarta (Indonesia), which aims to bring long-term finance to projects and companies that stimulate green growth and improve rural livelihoods in Indonesia. The initiative is supported by the Government of Indonesia and has UN Environment (UNEP), ICRAF (World Agroforestry Centre), BNP Paribas and ADM Capital as key partners. The core objectives are to scale up investment in renewable energy production, which means that more rural/marginalised communities have access to electricity, and to reduce deforestation and forest degradation by channelling finance to the sustainable production of agricultural commodities that combine enhanced value added of the agricultural sector with improved rural livelihoods and reduced pressure for forest conversion. The TLFF will consist of two parts: a Tropical Landscapes Loan Fund (TLLF) and a Tropical Landscapes Grant Fund (TLGF). Long-term loans issued by the TLGF will be bought and securitized through a Medium Term Note (MTN) program (Tropical Landscapes Bonds or TLB) by BNP Paribas, issued in individual tranches of \$100-\$200 million up to an initial amount of US\$ 1 billion.

The **UN-REDD Programme** has been operating in more than 60 partner countries over the past 5 years, including in **Liberia** and **Indonesia**. As the UN-REDD Programme moves to a new results-framework in 2017 and beyond, there will be more intensive programmes in a number of countries – including Liberia and Indonesia – to support these governments in achieving emission reductions/removals through a variety of policies and measures. It is important to ensure that the Production and Protection Fund is aligned with the UN-REDD Programme, and where possible mutually strengthen each other in order to deliver success.

This project will be part of the financing mechanism of a Partnership Program which will be soon launched by IDH together with Norway’s International Climate and Forest Initiative (NICFI). The **NICFI-IDH Partnership Program** will create impact through two essential mechanisms: convening and financing. The partnership program will provide a convening environment for the relevant public and private decision-makers and will enable them to make policies, act on agreed outcomes, and monitor the impact. The transformative agenda for Production Protection Inclusion land use requires multi-stakeholder buy-in to be effective, including producers, trade and industry, communities, local government and civil society. The program will be a neutral, engaged and professional convener of stakeholders to foster collaboration. In each of the targeted landscapes, the Program will facilitate to forge shared governance structure, including producers, communities, trade and industry, civil society and government. The program will support regular meetings to discuss achievements, progress, challenges, planning and alterations in Green Growth strategy. The program will help to create agreements at sub-landscape level between context relevant combinations of companies, government and communities for the development of PPI agreements. Further, the Program will create commitments of the public sector authorities in the landscapes and turn these into action; engage (inter)national trade and industry that have corporate commitments on zero-deforestation or zero-net deforestation and that are relevant to the commodity sectors in the landscapes. The Program envisages facilitating the development of verified sourcing systems that recognize PPI performance at landscape level, thereby enabling recognition in the market place. The Program will develop the learnings and innovation that are essential to the program, as the project aims to transform agricultural investments at scale. The key learning outcome is to build proof-of-concept on scalable PPI business and finance markets. The second level

of learning will take place in the structuring of the PPI deals. The investees, investors, other partners and IDH will engage in a learning process. To accelerate the learning and innovation, the project will work with partners to set up field projects to develop proof-of-concepts. The learnings from these field projects will be leveraged for the investment deals. The Program will help develop service delivery mechanisms that are critical to the uptake of the Production Protection Inclusion agenda. New service delivery models are envisioned, plus training of existing service delivery agents. Through a focused learning agenda, the Program plans to develop a knowledge base on the provision of the right incentives for sustainable land use beyond the PPI investment and sharing it with the stakeholders at landscape, investor, and value-chain company-levels. The Project will work with the UN-REDD programme to develop and implement an environmental safeguards/performance standards for the Production and Protection Fund (the ‘finance facility’). These “safeguards standards” are expected to go beyond the IFC Performance Standards, by linking these to the national REDD+ safeguards, and by going beyond the “do-no-harm” approach of the IFC Performance Standards to highlight (net)benefits. Program’s convening mechanism has US\$ 30 million budget, which will be funded by NICFI grant.

A number of projects and initiatives that have been and continue to be implemented that are relevant to the proposed GEF project:

In Liberia

Agriculture supports approximately 70-percent of the population, the majority being subsistence farmers, although there are also an estimated 900,000 small-holders, cultivating on average just 1.5 hectare plots of various cash-crops including palm oil. A large new SIDA programme of support has recently been launched to be implemented by international NGO GROW, involving US\$22m of funding to support market and supply chain development in the small-holder sector, including rubber, coffee and cocoa as well as palm oil. IDH partners with GROW and together developed the community palm oil outgrower model now adopted by the Liberian government.

The complementary Norway 150 million US\$ funded World Bank Liberia Forest Sector project (LFSP), works on bolstering Liberia’s protected areas and proposed protected areas, to ensure their effective management and conservation. IDH works together with the World Bank and Liberian Forestry Development Authority (FDA) to align the programs where IDH focus is on the production and protection in key expansion areas, whereas the LFSP supports forest protection at landscape level

In Brazil

In 2015/16 Brazil was the largest exporter of soybeans globally (approximately 54 million tons) the majority of which were exported to China. The main voluntary agreement minimizing forest conversion is the Soy Moratorium, signed in July 2006 by industry members of ABIOVE (Brazilian Vegetable Oil Industry Association) and ANEC (Brazilian Grain Exporters Association) and their members which pledged members to not buy soy produced in the Amazon biome after July 2006. The Soy Moratorium has been viewed as a success for the Amazon biome although it did push development of soy into the Cerrado biome. The government’s actions on its commitments to reduce deforestation include enforcing the new Forest Code of 2012, which establishes reserves and permanent protection areas, and requires a minimum level of forest cover on private land, and signing an MOU with Norway for up to US\$ 1 billion in payment for performance in reducing deforestation in the Amazon. The final installment of this has recently been transferred to Brazil’s Amazon Fund.

The Brazilian Central Bank issued a resolution on Environmental and Social Policy (SELP), which passed in 2014, requires all 2,000 Brazilian financial institutions to assess ESG (Environmental and Social Governance) risks and report on them publicly. Brazilian banks in general have developed cross-cutting and comprehensive policies for considering socio-environmental aspects in the processes for accepting new clients, credit limit evaluations and granting and monitoring of these loans however the priority among investors is corporate governance than social and environmental themes.

In Indonesia

Indonesia is one of the two biggest palm oil producers in the world (together with Malaysia). These two countries combined account for 80 percent of global production. And it has set a target to increase the volume of oil palm production by 60 percent from 2012-2020. Of the 11 million hectares of planted palm oil in Indonesia, smallholders represent 42 percent of Indonesia’s palm oil base of which 40 percent comes from independent smallholders (ISH) and 60 percent from plasma scheme smallholders (PSH). Access to finance was often cited as a major constraint for smallholders, as they often did not have the necessary collateral such as land titles to borrow from commercial banks, and had to rely on plantation companies to serve as guarantors for obtaining financing for operations and replanting.

In 2011, WWF combined with Rabobank and Caisse des Depots (CDC) to undertake the first business case analysis for the adoption of sustainability standards (RSPO- Roundtable on Sustainable Palm Oil, the global sustainability standard for palm oil) in the oil palm sector. The study was built on some of the early certified estates and did not focus as much attention on the tied smallholders or independent smallholders as little or no certification of these groups had been done at that time. RSPO certification has more than doubled since 2011 and represents 21 percent of global supply but there are still many smaller local palm oil plantations and most independent producers (including smallholders) not included in Indonesia.

1.3) THE PROPOSED ALTERNATIVE SCENARIO, WITH A BRIEF DESCRIPTION OF EXPECTED OUTCOMES AND COMPONENTS OF THE PROJECT

This project will be part of the financing mechanism which will be soon launched by IDH together with NICFI. The finance mechanism aims to bring together production and protection: Providing capital to investors in agricultural growth, whilst at the same time ensuring that precious forest and peat are well-protected and/or restored. The project aims at de-risking commercial financing of deforestation-free land-use through building a finance facility, called ‘Production and Protection Fund’ (PPF), develop a pipeline of investable projects and test it by investing capital in the 7 selected landscapes in Brazil, Indonesia and Liberia such that these private investments deliver 1.25 million hectares of forest protection as well as livelihood improvements for smallholders and communities living in those forests.

More specifically, this project will deploy public climate funds to de-risk and leverage private sector investments in sustainable agricultural production on the condition of strict forest protection measures. In the case of the Production, Protection and Inclusion Fund this means interventions will include provisions to improve access to capital to finance the core commercial activities related to production of agricultural commodities and providing finance at concessional rates (in order to make it financially attractive for the borrower or investee company) in return for commitments to protect the forest and peat lands of high conservation value and high carbon stocks. By providing access to cheap credit, the Fund, aims to contribute to changing the mindset of agricultural producers, traders, retailers as well as their financiers (bondholders, shareholders and lenders) that ‘zero-net deforestation’ is possible from a commercial perspective. As it has been in the case of renewable energy, subsidies – in this case in the form of concessional finance – are necessary to pave the way for a changing mindset and build a current nascent asset class for “sustainable land management”. The project will develop a robust pipeline with a dedicated investment team on the ground. In developing a robust pipeline the investment team will pay specific attention to inclusion of smallholder farmers where appropriate. A proper balance in the investment portfolio will be sought to optimize environmental impact, social impact, and scalability. The project will convene local public sector investors or other donors, who might be interested to invest in this Programme, around a common investment agenda with localized facility mechanisms. The project will create financial leverage by collecting and disseminating what has worked practically including data on returns and approaches to understanding local risks in a systematic way. By demonstrating and validating a successful model for sustainable financing, the Project will catalyze large-scale funding through broader adoption. The project will play ‘sticky capital’ role to crowd in private resources. Solid and credible monitoring of impact performance is critical therefore the impact monitoring, which will include the restoration and conservation of forests, degraded lands, and improvement in production, will be fully tied into the investment criteria of the PPI agreements. The reporting on impact performance will be fully integrated into financial planning.

The PP fund will invest in jurisdictions that meet the Eligibility Criteria (EC) for sub-national jurisdictions in Brazil, Liberia and Indonesia. The 7 landscapes are where IDH will convene multi-stakeholder coalitions, resulting in Green Growth Plans, PPI compacts and potential deals for the PP Fund to invest in. It is expected that these jurisdictions therefore meet the EC of the PP Fund. However, other jurisdictions might also meet the EC based on convening and preparatory work by other organizations. The fund is envisioned to influence Financial Institutions mainstream operations by introducing a credit portfolio of production-protection investments that are profitable and also not perceived as too risky (i.e. above-market risk). Cost of capital can be a major driver in the way supply chains are shaped. In that sense the PP Fund can be considered as a litmus test to see if concessional finance to invest in production and protection schemes is able to shape the agricultural supply chain in a significant manner. If that is indeed the case, then there is scope to expand it to other countries or landscapes (jurisdictions) to ensure this is further expanded.

Some details on the specific approach in each country is provided below:

Brazil:

The focus will be on a limited number of deals with large-scale intermediaries (“investees”) who have large production financing portfolios with producers/land-users on the ground. There are two critical elements to the investment logic in Brazil. Firstly, it is built on the investees motivation to support restoration and reforestation of degraded land as Brazilian law will make them liable if they transact with producers that are not in compliance with the Forest Code. Secondly, it leverages the investees’ existing array of production finance products, including the state rural credit lines, by including new protection performance criteria in exchange for the derisking of their production financing portfolios. Deals will be structured with the investees, in which the Fund will derisk their production finance portfolio with a defined set of producers, against a binding agreement to deliver hectares of forests reforested in this portfolio. This agreement is based on the target that all participating producers must reforest their deficits in riparian areas within 5 years (instead of 20 years as allowed by law) and conserve their legal reserves as stipulated by law. Based on the derisking offer from the Fund, the investees will develop and promote new production finance products, with financial benefits, for their existing clients, who are thus enticed to restore and reforest within 5 years (rather than 20).

Liberia:

Critical elements to the investment logic in Liberia are:

- 1) The oil palm concessionaires have concession agreements that 20% of the developed farmland in their gross concession should be for outgrowers. These companies provide a market opportunity, as well as manage the investment in palm oil development for the full credit cycle and build technical capacity of the communities (through employment and trainings);
- 2) Another key component of the investment logic is the hard condition (i.e. the PP Fund can't invest if there is no PPI agreement in place) for accessing a Production Protection Inclusion agreement (PPI) and long term protection plan for HCV HCS forest in the gross concession landscape.;
- 3) Long term monitoring of compliance with the PPI, with enforcement (financial penalties) in the case of non-compliance.

Indonesia:

The focus in Indonesia is on a limited number of deals with large-scale intermediaries (“investees”) who manage production financing portfolios with producers/land-users on the ground. These investees include banks and financial institutions such as Rabobank, Mandiri and Standard Chartered; various agribusiness companies across the broader supply chain and investment funds. There are two critical elements to the investment logic in Indonesia. Firstly, it is built on the investees’ inherent motivation to support restoration and reforestation of land use, as their own commitments and those of their clients (for FIs) or offtakers (for agribusinesses across the soft commodity chain company) require it. Secondly, it provides a financing option for investees whose clients/suppliers face an access to finance – specifically longer-term finance – gap due to the high risks in making upstream agriculture investments. Collaboration and aligned with the recently Tropical Landscapes Finance Facility will be sought where applicable and relevant.

The GEF investment will be paid back as shown in Annex 1 as a reimbursable grant. The structure of the fund does not allow for annual ‘pay backs’, and it is long tenure loans. Therefore, the requested non-grant is requested to have 20 years maturity with 15 years grace period.

1.4. INCREMENTAL COST REASONING AND EXPECTED BASELINE CONTRIBUTIONS FROM THE BASELINE, THE GEFTF, LDCF/SCCF AND CO-FINANCING

Scenario without the GEF investment: The baseline for the project rationale is mainly founded on efforts and actions implemented by the government institutions in cooperation with international funds and agencies. There is not yet any program to transform finance and business models in mainstream markets, such that they sustain land-use practices in which the increased production of agro-commodities contributes to the protection of forests and the inclusion of smallholders and forest communities in the economy for a long period of time. Without the GEF investment, companies will continue to consider investing in small holders as a risky business. Agricultural and other land users will continue to face with many commercial constraints in raising capital, therefore these land-users will not be willing to embed forest conservation in their business. Opportunities will be limited to attract increased levels of responsible foreign direct investment to support emission reduction goals acting as an incentive for central and local government to improve enforcement and regulation to facilitate the uptake of such private sector-financed agreements. Therefore, job creation and tax benefits from such sustainable initiatives will not be realized. Without the project’s interventions services and capacities in targeted regions will be limited. Regulations and local institutions will not provide an enabling environment that endorses the sustainability performance. Most importantly, local players in the private sector will not be guided properly to play an active role in forest governance and management.

Scenario with the GEF investment: The Non-grant instrument (NGI) of the GEF funds is critical to serve as catalyst to shift incentives towards expanding production on existing converted agricultural land as well as degraded land in combination with solid forest protection commitment. All GEF funding is directly going into the actual PP Fund, hence its share in any project will be proportionate to its % contribution to the Fund. In the beginning, the PP Fund will only fundraise from grants and redeemable grants. The GEF funding (classified as a redeemable grant) will take the same risk as the other grant and redeemable grant contributors to the Fund, with the difference to grant providers in that it expects repayment of its grant at a future date. The repayment might be impaired if the Net Asset Value of the Fund has decreased due to costs incurred and not (entirely) recouped from the investments made by the Fund. When the Fund transacts, it is able to provide various debt and mezzanine products in order to make a project work. The investment committee will assess whether or not the proposed instrument for a project is acceptable in order for the project to be successful (financially and from an impact perspective). The Fund manager and the investment committee will focus on two main high-level criteria when assessing the type of instrument or mechanism needed: (i) the project as a whole needs to make commercial sense over the term of the financing; and (ii) the project needs to deliver sufficient impact (specifically environmentally in terms of ha of protected forest as per the Fund’s own criteria). Given this, the Fund manager will propose debt-based instrument, which is most applicable for the project in question.

The current investment strategy expects a split of instruments between subordinated loans (40%), unfunded-risk sharing (guarantees) (30%), mezzanine debt (20%), and convertible debt (10%)²⁵.

The PP Fund will not take a majority stake in a loan facility, but instead requires counter parties such as development finance institutions (ADB, IFC, etc), commercial banks and others to provide capital as well (e.g. the PP Fund could for example provide a credit guarantee of up to 50% of a US\$ denominated loan facility by a private finance institution or the PP Fund could provide a 25% junior/subordinate debt position with 75% (or 4:1) coming from private finance institution counterparts). This means that every dollar of the GEF's NGI will unlock and leverage a larger amount of private finance. The fund will assist the investment into agricultural intensification on existing productive areas. It would also offset risk for companies to invest in small holders. The fund will offer risk mitigation and debt instruments: (i) Credit Guarantee/Partial Credit Guarantee: Credit guarantees will be commitment to reimburse lenders in case borrowers fail to repay a loan. (ii) Structured Financing: The fund will provide first loss guarantees that will enable companies and financial institutions to take financial risks on small holders, thereby facilitating local livelihoods. (iii) Concessional Loan: The fund will offer loans provided at below-market rates in return protection commitments. These are also called "soft loans." With relatively little public funding used to offset risk, mainstream finance institutions and development finance institutions as well as private sector companies themselves would be able to make investments that are compatible with protection.

The Fund expects to earn a return in any project, which it finances. The Fund will always aim to cover its operating costs (cost of capital and transaction costs) from an investment. In other words, the Fund will not set a predefined interest rate for its debt instruments. However, it will aim to price its debt-based instruments as close to the market rate as possible, taking into account the commercial aspects of the project and its criteria for environmental protection. So for example, in a smallholder palm planting project in Liberia the Fund might not be able to charge more than 1-2% as the commercials would make the project unsustainable above that (given that a DFI might say charge 5-7%, and the mixed rate required for the model is closer to 3-4%). However, in a project with soy farmers in Brazil, the Fund might follow a commercial bank in charging market rate but take a subordinate position, which will be unpriced and a slightly longer payback. This could be sufficient to catalyse the impact the Fund is looking for. All projects should cover costs, thus priced at least in the 1-2% and overall the Fund plans not to take more than 50% unhedged local currency exposure.

The companies being considered range from large companies to medium size companies, which are usually 3rd party suppliers. The fund will be channeled to companies mostly through financial institutions (FIs) allowing the fund to tap into the capillarity of these partners in reaching individual farmers – driving down transaction cost, risk and using structures farmers trust. Three major types of FIs will be considered: (i) Development FIs including but not limited to like IFC, Netherlands Development Finance Company (FMO), Proparco (French DFI) (ii) national FIs like BRI (Indonesia), Banco do Brasil (Brazil), Rabobank (Dutch), and (iii) impact investors like Althelia, the Tropical Landscapes Finance Facility (TLFF) and the LDN (Land Degradation Neutrality) Fund. The PP Fund will normally invest via financial intermediaries (DFIs, FIs and impact investors). The Fund expects to be able to leverage its funding 4 times, meaning on average it will be only contribute 25% of a project's required investment. Thus, the other partners will carry the rest. Likely, the beneficiaries own capital will vary depending on the type of project, but we expect around 0-20% on average to come from the actual land-user. 10-50% from the supply chain company and the rest from the financial institutional partner.

The PP Fund will sometimes invest via large companies, e.g. in Indonesia in order to reach their plasma scheme and independent small holders. In some cases, the PP Fund will invest in Special Purpose Vehicles created to enable investment in solely small holder schemes. This will be piloted in Liberia.

1.5. GLOBAL ENVIRONMENTAL BENEFITS (GEFTF, NPIF) AND/OR ADAPTATION BENEFITS (LDCE/SCCF)

The project will contribute to global environmental benefits primarily through change in business practice, both in the land-use sector as well as the financial sector. The global benefits from the GEF investment and the co-finance include:

- 250,000 ha of forest cover directly protected (including reforested)²⁶
- 180,000 ha of indirectly avoided deforestation²⁷,
- 84,000 ha of sustainable production,
- 222,600 tCO₂e mitigated through reforestation, avoided deforestation, and forest protection

²⁵ This is an estimation based on current pipeline development. Changes in market conditions will affect the type of instrument needed to finance projects.

²⁶ Accessing the fund requests a long term protection plan for forest in the gross concession landscape. The ratio changes in each landscape however the average will be 1:3. Therefore, 84,000 ha of sustainable production will provide protection for 250,000 ha of forests.

²⁷ This benefit is specific for the pilot in Brazil. These are hectares of deforestation indirectly avoided by expanding crop production on existing productive area.

- Innovative application of financial mechanisms and partnerships which may be broadly adopted and can be scaled up in integrated landscape management will be demonstrated.
- Support provided for innovative engagement of the private sector and public sector through innovative business models;
- Demonstration of using non-grant instruments as a de-risking fund, with junior debt positions to banks and supply chain players in areas other than climate change focal area,

1.6. INNOVATIVENESS, SUSTAINABILITY AND POTENTIAL FOR SCALING UP

Scaling Up :

The Production Protection Inclusion Fund can expand to other countries and other commercially productive landscapes, and potentially other countries, provided they meet eligibility and investment criteria and more investors step in. Other investors will be targeted in order to optimize the potential of the Fund for private sector driven impact on forest protection. Other international investors and development agencies can be included, complementing the project’s technical, financial and convening capacities over time.

Sustainability: A premise of the project is that incentive-based approaches are a key strategy for achieving ecological sustainability in partnership with local communities. Decisions made by resource users at the local level will determine the fate of environment. The initiatives supported under the project will demonstrate how financial incentives can achieve behaviour change on the part of resource users that will contribute to sustainability. Once successfully proven in different geographies, it is likely that local actors (public and private) will be willing to scale such an approach themselves given the benefits for both. The approach (and accompanying use of derisking capital) could then be expanded to other landscapes and countries in which there are deforestation-trends linked to private sector production expansion.

Innovativeness: The Project aims to transform finance and business models in mainstream markets, such that they sustain land-use practices in which the increased production of agro-commodities contributes to the protection of forests and the inclusion of smallholders and forest communities in the economy for a long period of time, which the project defines as Produce, Protect, and Include. The project will build a derisking finance facility, develop pipeline and test it by investing in selected landscapes in Brazil, Indonesia and Liberia. The finance facility will contribute to countries’ land degradation efforts, and SDG targets by mobilizing private finance. Two other key innovations relate to the change in culture within finance institutions and the fact that commercial lending is possible for smallholders. In terms of a cultural change within financial institutions, the prevailing paradigm is that investing or lending according to stringent sustainability criteria is not profitable. By financing business models that focus both on generating revenue through soft commodity production – but at the same time decouple it from forest impact – the mindset of bankers can be changed in that lending products can be offered to clients where sustainability criteria are intrinsically embedded in the financial conditions of the loan. Second, it is currently difficult for smallholders to obtain loans, and if it possible it is often on short repayment periods and at high interest. By stimulating (on)lending to smallholders, banks get a better sense of the credit worthiness of these currently excluded group.

2. **Stakeholders.** Will project design include the participation of relevant stakeholders from [civil society organizations](#) (yes /no) and [indigenous peoples](#) (yes /no)? If yes, identify key stakeholders and briefly describe how they will be engaged in project preparation.

The stakeholders are provided in the table below. The investment partners and beneficiaries are provided in a separate table below.

Stakeholders

Stakeholder	Current Mandate / Responsibilities	Expected Role in Project Preparation
<i>Global</i>		
UN Environment (UNEP)	UNEP is co-executing Transactions child project of the Commodities IAP and as one of the key agencies for the UN-REDD programme, UNEP leads and delivers on a variety of activities at both the national and global level	Providing technical backstopping for the IDH during the project preparation
Norway’s International Climate and Forest Initiative (NICFI)	NICFI is the main donor of the initiative	Advisory role and providing substantive input
The GEF Secretariat	Leading the 3 IAPs and the funder of the proposal	Advisory role and providing substantive input
The Nature Conservancy (TNC)	TNC is a conservation organization working around the world to protect ecologically important lands and waters for nature and people	Providing inputs for the design of activities for Technical Assistance to companies
The World Resources	WRI leads Global Forest Watch program which is an	Providing inputs for the design of the

Institute (WRI)	interactive online forest monitoring and alert system	impact monitoring activities
The Ministry of Environment and Forest, Indonesia	Government authority on environmental policy in Indonesia	Providing technical inputs and alignment with other national initiatives
The Ministry of Agriculture, Indonesia	Government authority on agricultural policy in Indonesia	Providing technical inputs and alignment with other national initiatives
The Ministry of Agriculture, Brazil	Government authority on agricultural policy in Brazil	Providing technical inputs and alignment with other national initiatives
The Ministry of Environment, Brazil	Government authority on environmental policy in Brazil	Providing technical inputs and alignment with other national initiatives
The Ministry of Agriculture, Liberia	Government authority on agricultural policy in Liberia	Providing technical inputs and alignment with other national initiatives
Aidenvironment, Indonesia	NGO with know-how on sustainable land-use management and forest protection/restoration	Providing inputs for the design of activities for Technical Assistance to companies
Fauna and Flora International (FFI)	NGO with know-how on sustainable land-use management and forest protection/restoration	Providing inputs for the design of activities for Technical Assistance to companies
Zoological Society of London (ZSL)	NGO with know-how on sustainable land-use management and forest protection/restoration	Providing inputs for the design of activities for Technical Assistance to companies
The Forest Trust (TFT)	NGO with know-how on sustainable land-use management and forest protection/restoration	Providing inputs for the design of activities for Technical Assistance to companies
Instituto Centro de Vida (ICV)	NGO with know-how on sustainable land-use management and forest protection/restoration	Providing inputs for the design of activities for Technical Assistance to companies
Aliança da Terra	NGO with know-how on sustainable land-use management and forest protection/restoration	Providing inputs for the design of activities for Technical Assistance to companies
Conservation International (CI)	NGO with know-how on sustainable land-use management and forest protection/restoration	Potential delivery of Technical Assistance to company investing in sustainable land-use
Fauna & Flora International (FFI)	NGO with know-how on sustainable land-use management and forest protection/restoration	Potential delivery of Technical Assistance to company investing in sustainable land-use

Investors and Beneficiaries

Investor/Beneficiary	Current Mandate / Responsibilities	Expected Role in Project Preparation
<i>Global</i>		
The World Bank and IFC	Multilateral Development Organization	Potential investor
IFC	Development FIs	Potential investor
Netherlands Development Finance Company	Development FIs	Potential investor
Proparco (French DFI)	Development FIs	Potential investor
BRI (Indonesia),	National FI	Potential investor
Banco do Brasil (Brazil)	National FI	Potential investor
Rabobank (Dutch)	National FI	Potential investor
Tropical Landscapes Finance Facility	Programme to channel long-term and concessional finance for rural renewable energy production and sustainable landscape management. MoU between IDH and TLFF was signed in Marrakech, November 2016.	Potential co-investor.
<i>Indonesia</i>		
Asia Pulp and Paper (APP)	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers
Golden Agri Resources (GAR)	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers
PT.Putraalinson Perkasa (PT. PAS)	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee
ANJ Agri	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers

Bumitama	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers
Hindoli	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers
Sinar Mas	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers
Wilmar	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers
<i>Brazil</i>		
Amaggi	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers
MARFRIG	Supply chain company, in need of investment in sustainable land management throughout the supply chain	Potential investee, with its third party suppliers
Grupo Roncador	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee, also with its third party suppliers
<i>Liberia</i>		
Golden Veroleum Liberia (GVL)	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee
Sime Darby Plantation (Liberia) Inc. (SDPL)	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee
Equatorial Palm Oil plc (EPO)	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee
Maryland Oil Palm Plantation (MOPP)	Land owner, in need of investment in sustainable land management throughout the supply chain	Potential investee

3. *Gender Equality and Women's Empowerment.* Are issues on [gender equality](#) and women's empowerment taken into account? (yes /no). If yes, briefly describe how it will be mainstreamed into project preparation (e.g. gender analysis), taking into account the differences, needs, roles and priorities of women and men.

Women's role in agriculture and their vulnerability to the impacts of land degradation are usually neglected. Land degradation affects men and women differently given their differing productive roles. Diminished soil fertility cut into agricultural production and for additional sources of income young people, especially men, embark on seasonal or permanent migration. This puts a significant burden on women – as labour increases but results in less output because of the declining carrying capacity of the soil. Women also take over roles traditionally handled by men.

Development implies social change, and social change has gender implications. A program that is concerned with forest protection as well as financial dynamics that can support forest protection is likely to attract technical skill sets from natural sciences as well as from business/financial backgrounds. It will be an important task for the conveners to engage women as well as men in their discussions. Production-intensification on converted land may have a profound gender implication, depending on who is doing the intensified work, how salaries are paid equally or unequally to men and women doing the same job, how working hours will shift or not, and how family life and obligations would be impacted.

Within small holder engagement process, a balanced engagement among male and female landowners and land-workers will be targeted. Similarly, it will be important to assure that convening platforms (with local government, private sector, CSOs) have representatives from both genders. During the project execution, impacts on gender equality will be considered and both men and women will be targeted for support, taking into account the social context on the ground.

Collaborative management methods will be used as an approach to engage stakeholders as collaborators in the design and implementation of project activities that take into account gender issues. Wherever possible, gender-sensitive indicators and sex-disaggregated data will be included in the project's monitoring and evaluation plans.

4 *Risks.* Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

The following risks have been identified. However, risks will be validated and re-assessed during the PPG:

Risk	Level of Impact	Mitigation Measures
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Local governments are not committed in the programs and therefore sustainable change cannot be achieved.	Medium	Involve local governments from the very first start actively, in order to align strategic planning. Use relevant government policies, programs and interventions at the national level that can facilitate local government commitment.
Multinational companies' interest overshadow the interest of smaller (local) companies	Medium	Ensuring good and transparent communication of program objectives and results to SMEs and other stakeholders, so that their needs are addressed and they feel that they have ownership of the initiative. Continued monitoring of public good impact when working with larger companies.
The funds are not adequately used.	High	Monitoring and reporting system in place. Mid and annual reporting in place. Annual program and project audits in place. Audits in accordance with PP Fund's audit protocol. PP Fund has regulated governance structure in place, including an Investment Committee operating on the basis of best international practice.
The PPI Fund makes investments in high-risk or un reputable private sector companies or producers	Medium	The Fund only invests together with reputable FI's thus is able to rely on the FI's credit risk assessment of the investee as well as their Know Your Client (KYC) and similar risk management procedures.
Improved income might motivate the farmers to expand their operation and encroach forest. This might result in additional deforestation.	Medium	Sustainability criteria have strong focus. Programs are promoting GAP (pre-requisite for investment) as measures to improve productivity of existing plantation. Clear criteria for eligible production areas. Production Protection Inclusion agreements with communities and farmers to embed sustainability at field level (e.g. through village conservation agreement attached with productivity programs).
Linkages between local planning and regional or national planning don't enable sustainable land use planning at landscape scale	Low	Relevant larger scale planning entities both at land use and agriculture will be included in the convening and consultation processes
<i>Liberia specific</i>		
The PPI Fund makes investments in high-risk or un reputable private sector companies or producers	Medium	The Fund only invests together with reputable (D)FI's thus is able to rely on the (D)FI's credit risk assessment of the investee as well as their Know Your Client (KYC) and similar risk management procedures.
Political instability	High	Closely monitor outcomes of 2017 elections. Ensure buy-in from local to national key stakeholders to manage potential challenges emerging from political processes
<i>Indonesia specific</i>		
Un-clarities and inconsistencies in the regulatory framework at national and local levels hamper investment in production and protection	High	Identify the key un-clarities and inconsistencies which may hold back investments in production and protection and work closely with the respective authorities and development partners on policy and regulatory improvements.
The lack of proven examples causes reluctance among especially small and medium companies to invest in production-protection	High	Develop and disseminate proof of concept, via small scale pilots or projects with large companies that can take more risk. Co-fund pilot projects in order to broaden the PPI knowledge base.
Lack of capacity in local civil service to guide and take part in complex production and protection deals	High	Cooperate with development partners that have specific programs for capacity building of local government institutions involved in forest protection and spatial planning. Try to build the production and protection deals with well-established and staffed institutions/departments of local government.
<i>Brazil specific</i>		
Agribusiness sector takes advantage from un-clarities in rules and/or potentially weak enforcement of the Forest Code	Medium	Convince the agribusiness sector of the potential gains of FC compliance, by linking it to investment opportunities and market requirements. Create best practice with frontrunner producers (likely larger producers) to build the business case for others. Policy dialogue with State and Federal Government to ensure clarification by further regulation of specific elements of the FC (see log frame and answers to questions)
Continuation of the economic crisis in Brazil may limit the appetite of farmers and investors to invest in intensification and restoration	Medium	Create best practice with frontrunner producers (likely larger producers) to build the business case for others. Investment facility will include the de-risking of country risk. When capital is more expensive on the market, the benefits of the derisking facility are more pronounced
Knowhow and technology for restoration economy is there, but needs to be scaled up and	High	Work closely with Federal institutes and private sector to accelerate the innovation process.

made available to general public.		In our pilots (for now especially PRA Combo and PRA Teles) we will work with scaling up the restoration economy. Partnering with IPAM, ICV, TNC, SRB, WWF, Conservation International, and others.
High soy and beef prices and land speculation cause illegal deforestation, undermining the production protection agenda	High	Work on improving enforcement of the government with a focus on the top-10 municipalities. Partnering with national and international civil society organizations and platforms such as CGF/TFA to hold federal and state governments accountable to their commitments. Prepare a communication plan to explain to stakeholders what is happening

4. *Coordination.* Outline the coordination with other relevant GEF-financed and other initiatives.

The project will build on and coordinate with the following on-going projects:

- **Taking Deforestation out of Commodity Supply Chains:** Commoditized IAP aims at reducing the global impacts of agriculture commodities expansion on GHG emissions and biodiversity by meeting the growing demand of palm oil, soy and beef through supply that do not lead to deforestation. There will be strong complementarity among the IAP projects and this Project. This project will benefit from and contribute to the Commodities IAP's child project on adaptive management and learning.
- **Amazon Sustainable Landscapes Program** program's objective is to protect globally significant biodiversity and implement policies to foster sustainable land use and restoration of native vegetation cover. The program has a specific component on improving sector policies and regulations for the reduction of deforestation through an integrated landscape- and sector-based approach. The project will benefit from the capacity built by the programme.
- The new GEF Project which is under preparation, titled "**Strengthening Forest Area Planning and Management in Kalimantan**" will promote systemic long-term changes beyond the oil palm supply chain. This project will provide policy support on strengthening forest area management and planning. The outputs of the project will be taken as policy inputs.
- **Strengthening Forest and Ecosystem Connectivity in RIMBA Landscape of Central Sumatra through Investing in Natural Capital, Biodiversity Conservation, and Land-based Emission Reductions (RIMBA project)** aims to protect biodiversity and to increase carbon stocks across the RIMBA Corridor of Sumatra by enhancing forest ecosystem connectivity through green economic development. The Rimba project will establish and build capacity for a green economy strategy. The Project will inform the RIMBA initiative about programme in Sumatra and will seek collaboration.
- **Realising the biodiversity conservation potential of private lands in Brazil** aims to scaling up sustainable landscape management and improving biodiversity conservation and ecosystem services provision in Brazilian private set-aside areas. The project will develop sectoral agreements with the forestry sector, containing SLM guidelines for private set-aside areas, and incentive packages will be created tradable environmental certificates. The proposed project will collaborate with this national project for joint efforts in establishing agreements with economic sectors and identify possible synergies in development of incentive packages.
- **UN-REDD Programme** – A multi-donor programme focused on reducing emissions from deforestation and forest degradation in developing countries. Significant linkages can be exploited on efforts to engage the private sector in REDD+ implementation and on identifying financial mechanisms to take out deforestation from commodity supply chains. The Project will work with the UN-REDD Programme to ensure that the PPI is linked to the National REDD+ Strategies and related actions taken by partner governments to reduce/remove emissions through a variety of policies and measures. The project will benefit from the following Programme outputs: (i) "Country approach to safeguards; (ii) Identification of opportunities for collaboration with private sector companies and initiatives; (iii) Identification of potential zones for specific REDD+ policies and measures at subnational scale.

5. *Consistency with National Priorities.* Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, etc.

As finance mechanism to the UNFCCC, UNCBD, and UNCCD, the GEF plays an important role in supporting global forest management and conservation. The project will address the common goal of reducing and avoiding the loss of forest resources, and will support the following objectives:

Aichi Biodiversity Targets (CBD decision X/2)

- Target 5. By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
- Target 7 By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

REDD-plus activities (UNFCCC decision 1/CP.16)

- i. Reducing emissions from deforestation.
- ii. Conservation of forest carbon stocks.

DLDD and sustainable forest management (SFM) (UNCC D decision 4/CO P.8)

- i. Reinforce SFM as a means of preventing soil erosion and flooding, thus increasing the size of atmospheric carbon sinks and conserving ecosystems and biodiversity.

The program also contributes to the UNFF Global Objectives on Forests (E/2006/42 E/CN.18/2006/18): Reverse the loss of forest cover worldwide through SFM, including protection, restoration, afforestation, and reforestation, and increase efforts to prevent forest degradation.

In addition, the project will support achievement of the following sustainable development goals: Poverty Reduction (SDG #1), food security (#2), gender equality (#5), responsible consumption and production (#12), climate action (#13), and halting land degradation and biodiversity loss (#15).

The UNEP Regional Offices for Latin America and the Caribbean (ROLAC), for Africa (ROA) and for Asia and Pacific (ROAP) will support the promotion and integration of the outcomes from this project in the Planning Processes and UNDAFs of target countries, as well as provide a platform for dissemination of results, and provision of technical support to countries. The project contribution to relevant sections of the UNDAF and National Action Programmes (NAPs) for combating land degradation is summarized below:

Country	Project Contribution to relevant sections of the UNDAF and NAPs
BRAZIL	<p>The Project will contribute to Brazil’s stated outcome of: “National policies to promote the green economy (with expansion and improvement of formal employment and new businesses, new technology development and qualification of productive actors) expanded and strengthened”, as outlined on pages 27-32 of its UNDAF (2012-2015): https://ims.undg.org/downloadFile/8788f555ba432c662f8be1d29e04760c16dcf563ad651ba59a5d34501a6edfbf</p> <p>NAP: The Project will contribute to Brazil’s following actions: (i) Sustainable expansion of productive capacity (- Improvement of Infrastructure; - Strengthening Productive Activities; and - Improvement of the Flow of Investments); and (ii) Preservation, Conservation and Sustainable Management of Natural Resources (-Sustainable Management of Forest Resources)</p>
INDONESIA	<p>The Project will contribute to Indonesia’s stated outcome of “By 2020, Indonesia is sustainably managing its natural resources, on land and at sea, with an increased resilience to the effects of climate change, disasters and other shocks” as outlined on page 42 of its UNPDF (2016-2020): https://ims.undg.org/downloadFile/66e569e80493448eb172e03c6bfb6bbaf439f11a5000f78a28665a41abfe5c8b</p> <p>NAP: The Project will contribute to following programmes of Indonesia’s NAP: (i) Providing Enabling Conditions (Enhancing effective institutions to effectively execute the programmes); (ii) romoting of Agroforestry (Providing high quality seed/planting material and dry land farming inputs); (iii) Prevention of Land Degradation (Providing credit scheme for conservation farming systems; Providing guidelines and standards for soil conservation techniques); (iii) Rehabilitation of degraded forests and lands.</p>
LIBERIA	<p>The Project will contribute to Liberia’s stated outcomes of: Outcome 2.1: Natural Resources Utilization and Food Security : sustainable natural resources utilization and sustained food security; Outcome 2.2: Private Sector Development: Access to sustainable livelihoods in an innovative and competitive private sector; and Outcome 2.4: Macroeconomic Policy: Evidence based policies for stable and sustained macro-economic environment --as outlined in its UNDAF (2013-2017) https://ims.undg.org/downloadFile/505b012e398561e59cee50803346f00d49f3c452dd8e16760521c22db743d200</p> <p>NAP: The Project will contribute to following strategic objectives of Liberia’s NAP: Strategic Objective 1: Improvement of the standard of living of the people in the areas affected by the land degradation and its associated negative impacts; Strategic Objective 4: Mobilization of resources financial and human for the implementation to the SLM, NAP are effected through partnerships bilaterally and multilaterally as well as within the country.</p>

7. *Knowledge Management*. Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

Together with public and private partners the project will explore, prototype and evaluate cost efficient and effective interventions to deliver desired outcomes that are scalable, internalized by businesses, in an enabling environment of effective public-private collaboration. The learnings and innovation that are essential to the project results will be developed by leveraging on IDH's Initiative for Sustainable Landscapes program and including resources to develop publications and join and/or host events with a special focus on Green Growth Plans and Production Protection Inclusion agreements.

The first level of learning will take place in the landscape coalitions on strategic issues and critical challenges that being faced. The second level of learning will take place in the structuring of the Production Protection Inclusion deals. The investees, investors, other partners and ourselves will engage in a learning process. In order to accelerate the learning and innovation, Project will work with partners to set up field projects to develop proof-of-concept. The learnings from these projects will be leveraged for the investment deals. IDH's learning & innovations and communications departments are designed to strengthen the transformation drive of the sector programs. Through the execution of the project, the project team will capture and disseminate best practices, lessons and models within and across sectors through publications and workshops.

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

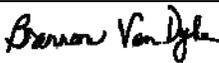
A. RECORD OF ENDORSEMENT²⁸ OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S):

(Please attach the [Operational Focal Point endorsement letter](#)(s) with this template. For SGP, use this [SGP OFF endorsement letter](#)).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies²⁹ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Brennan Van Dyke Director, GEF Coordination Office, UNEP		January 13, 2017	Ersin Esen Task Manager	+41-22-917 8196	ersin.Esen@unep.org

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (APPLICABLE ONLY TO NEWLY ACCREDITED GEF PROJECT AGENCIES)

For newly accredited GEF Project Agencies, please download and fill up the required [GEF Project Agency Certification of Ceiling Information Template](#) to be attached as an annex to the PIF.

²⁸ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

²⁹ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF

Annex 1: Calendar of Expected Reflows

The PP Fund products will be priced covering cost of capital (near zero) + transaction costs (legal, monitoring, etc) - there will be limited scope for the PPF to claim any upside (financially) on these projects.

A guarantee is not released until the end of the project tenor hence in order to match cash flows (assets to liabilities). Therefore, the fund will be selective in accepting an investors product which includes early stage repayment of principal. Different tenor will be applied for different purposes. However, replanting and for green field the tenor will be at least 15 years. Therefore, it is expected that the GEF funding is paid back in minimum 15 years to cover the maximum tenor. Ideally it is expected that the cash flows are back loaded resulting in grace periods and similar low early years payback.

The proposed tenor is based on the expected liabilities, and their duration, that the Fund will incur through its investments. A key comparative advantage for the Fund is its ability to offer long-tenors in these producer countries. Most commercial investors, including local financial institutions, are unable to provide tenors over ten years (often even five years) due to the country, fx and commodity risk profile of these projects. It is likely that a high percentage of projects financed by the Fund will be for long-term capital expenditure projects (e.g. replanting of palm oil trees) as this is where the access to finance gap lies. In the key-focus commodities of the Fund, investments into intensification of production are typically between seven and fifteen year projects. Hence the Fund needs to find, invest and then recoup its investment from these projects in order to repay its contributors (GEF in this case). The Fund will structure its payment schedule with investees in a manner that makes most sense for the success of the project, and often this will result in back-ending the repayment of its investment. Thus, the request for the payback schedule is shown in the following table. The interest schedule suggesting (0%) reflects the expectation that the Fund will not generate above 0% return (after costs) on its projects on average (i.e. across the total portfolio). This is because it will not cover the full credit risk of the projects it is investing in, but rather can only commit to always covering its transaction costs and its cost of capital through its pricing of investments. Therefore, over a portfolio of projects the credit risk will likely result in some credit default(s) and the Fund might not be able to cover that with performance from other projects.

The reason the Fund charges a below market return (or has the capacity to do so) is in order to develop an impactful project which otherwise cannot reach break-even because of the high financing costs from the market. The Fund will always need to prove additionality to its investment committee, and that it will not crowd-out other investors. It will only invest in projects where it can clearly show that its financing is needed for the project to succeed and furthermore that it has an exit strategy for itself (the Fund) which could result in other more-commercial actors taking this or similar projects forward. It should be noted that in some projects the Fund might be able to charge a higher fee (for example when the project itself generates strong free cash flows) however the Fund's pricing will still not cover its risk (for being subordinate for example) as it will be requiring significant investment from the investee on the protection part and for this it needs to be able to incentivize adequately. The Fund aims to balance out its performance in order to break-even over the long-run however from a purely financial perspective it will only do so if the current uncertainty priced by the market is in fact incorrect (perceived risk gap). As a result, the PP fund will only raise 0% funds or redeemable grants in the beginning phase.

Year	Investment	Accrued Interest	Reflow	Balance
2018	-2,000,000			-2,000,000
2019		0		-2,000,000
2020		0	0	-2,000,000
2021		0	0	-2,000,000
2022		0	0	-2,000,000
2023		0	0	-2,000,000
2024		0	0	-2,000,000
2025		0	0	-2,000,000
2026		0	0	-2,000,000
2027		0	0	-2,000,000
2028		0	0	-2,000,000
2029		0	0	-2,000,000
2030		0	0	-2,000,000
2031		0	0	-2,000,000
2032		0	0	-2,000,000
2033		0	2,000,000	0
Total	-2,000,000	0	2,000,000	

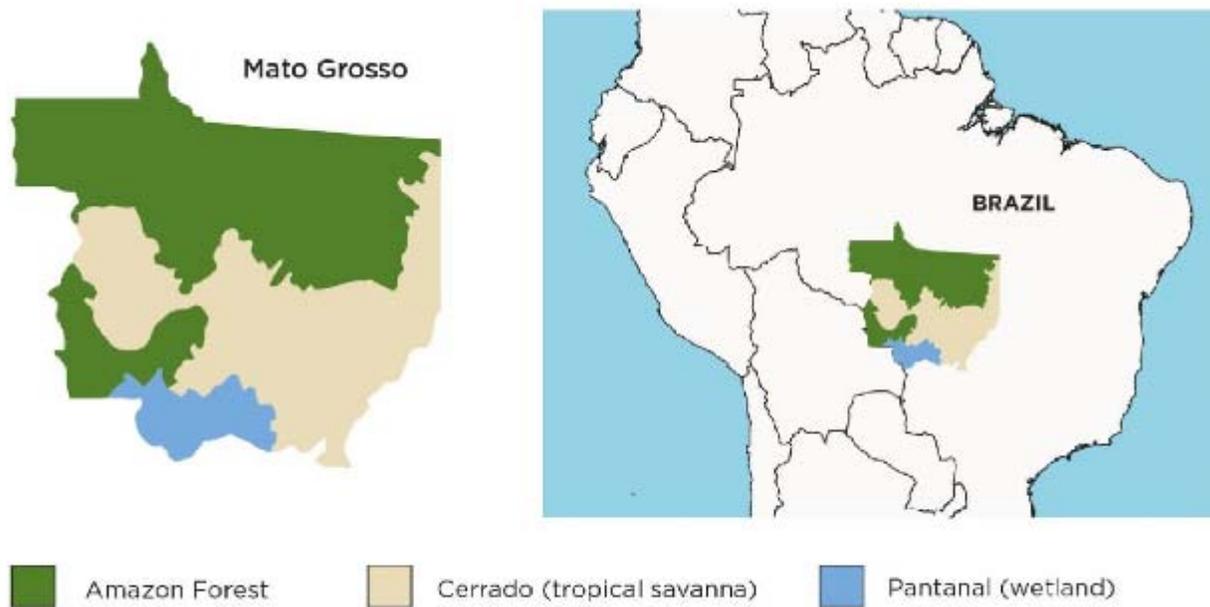
Annex 2: Description of the Target Landscapes

The project will work in seven landscapes across three continents. All seven landscapes are sourcing areas for multiple agro-commodities, harbor high conservation value areas (HCVAs) and are home to communities who depend upon natural resources for food and income-generation. While developing economically, these landscapes face significant social and environmental issues and concerns that would benefit from a cross-sectorial multi-stakeholder landscape approach that marries production and protection. At the same time the seven landscapes are significantly different in terms of geography, biome, size and commodities – creating an inspirational, challenging and diverse program portfolio.

Brazil:

The State of Mato Grosso

The project will, in Brazil, focus in the State of Mato Grosso, located in the Centre-West Region of Brazil. Mato Grosso has a total area of 903,000 km². The State population totals approximately three million people, with an urbanization of 82%. The State is composed of three biomes: the Amazon (53% of the territory), the Cerrado (40%), and the Pantanal (7%). Around 60% of the total territory is still natural forest, making the State crucial for biodiversity conservation and mitigation of climate change.



Source: SEMA MT and Google maps

Yet the State is also a world leading producer of agricultural commodities such as grains, cotton and meat. The State is the world's most competitive grain producer responsible for 9% of global soy output and 30% of national production. It is the largest beef producer in Brazil (with exports of over US\$ 1 billion) and leading cotton producer, with 60% of national production. Agricultural and livestock production in tons of product are projected to increase by 76% by 2022.³⁰

Until 2014, 40% of the total native vegetation had been cleared for agricultural production., Mato Grosso was responsible for 34% of deforestation in the Legal Amazon between 1988 and 2014. A significant change occurred statewide between 2011 and 2015³¹ as deforestation rates decreased by 75%, thanks to a large part to the command and control system that the government built, as well as the agreements made in the soy and cattle sectors to reduce deforestation (soy moratorium and cattle agreement). However, in 2015, the highest deforestation rate since 2008 was detected in Mato Grosso, including a large increase in deforestation on large private properties.³² This indicates that, if not well addressed, the aforementioned growth to commodity production will continue to constitute a key driver of deforestation, threatening primary forest and high conservation

³⁰ Base year 2012, IMEA, 2012

³¹ PCI plan, MT government, 2015

³² Prodes, 2015

value areas. Also smallholder producers in rural settlements – responsible for 17% of the deforestation in the Mato Grosso Amazon biome³³ - will continue to encroach forests unless viable economic alternatives are created for them.

Total Area	90 million ha
Protected forests in natural reserves and indigenous territories	19 million ha
Forests on private land	37 million ha
Productive land	
• Pastureland	24 million ha
• Crops	8 million ha
• Other	2 million ha
Environmental Deficits	
• Riparian areas (APP)	565 thousand ha
• Legal reserve (LR)	5.8 million ha

Land Use in Mato Grosso³⁴

Mato Grosso can achieve growth without further deforestation. The State offers ample opportunities to increase productivity on the existing productive area, which will be sufficient to accommodate the future growth of commodity production within that same area. In particular pastureland, occupying 24 million ha in Mato Grosso, is largely unproductive (an estimated 50 – 60% of all pastures is degraded).³⁵ Restoration of pastures, combined with cattle intensification and implementation of good agricultural practices, has the potential to free up to 16 million hectares of land in for expansion of crop farming and for reforestation as per legal requirements.

If supported by the right set of policy, financial and market conditions, the opportunity for deforestation-free growth can become commercially viable. Cattle intensification by itself provides a solid ROI, but the investment is high-risk and with a long period before break-even. Besides this, the cattle production cycle is typically a cash-driven business model, meaning there is a limited borrowing culture using formal banking institutions, therefore intensification and restoration of pastures currently do not occur at the scale and pace needed. Restoration of forests will present negative financial returns, but the costs can be reduced, when reforested areas can (partly) be economically productive, for example by planting fruit trees or species suitable for timber, as permitted by the Forest Code.

Calculations by IDH and AgroIcône show a positive business case of cattle intensification combined with forest restoration for medium to large cattle ranchers – average 12% Internal Rate of Return in the Amazon, 21% in the Cerrado over 15 years.³⁶ For smallholder producers the business case is not positive, indicating the need for additional support and policies, such as technical assistance, credit lines and market linkages.

Indonesia

South Sumatra and Jambi:

South Sumatra covers an area of 8.7 million ha where 3.5 million ha of it is designated as forest area and 1.4 million ha of peat area. Only 1.3 million ha of the designated forest area however is actually covered with forest vegetation. The province is home to a number of important protected areas. These include the Bukit Barisan Selatan National Park, the Berbak-Sembilang National Park (located in both South Sumatra and Jambi), Dangku Conservation Area, Padang Sugihan and Bentayan sanctuary and Harapan Rainforest (also located in both South Sumatra and Jambi), which all face significant pressure from encroachment, fire, illegal logging and illegal conversion.

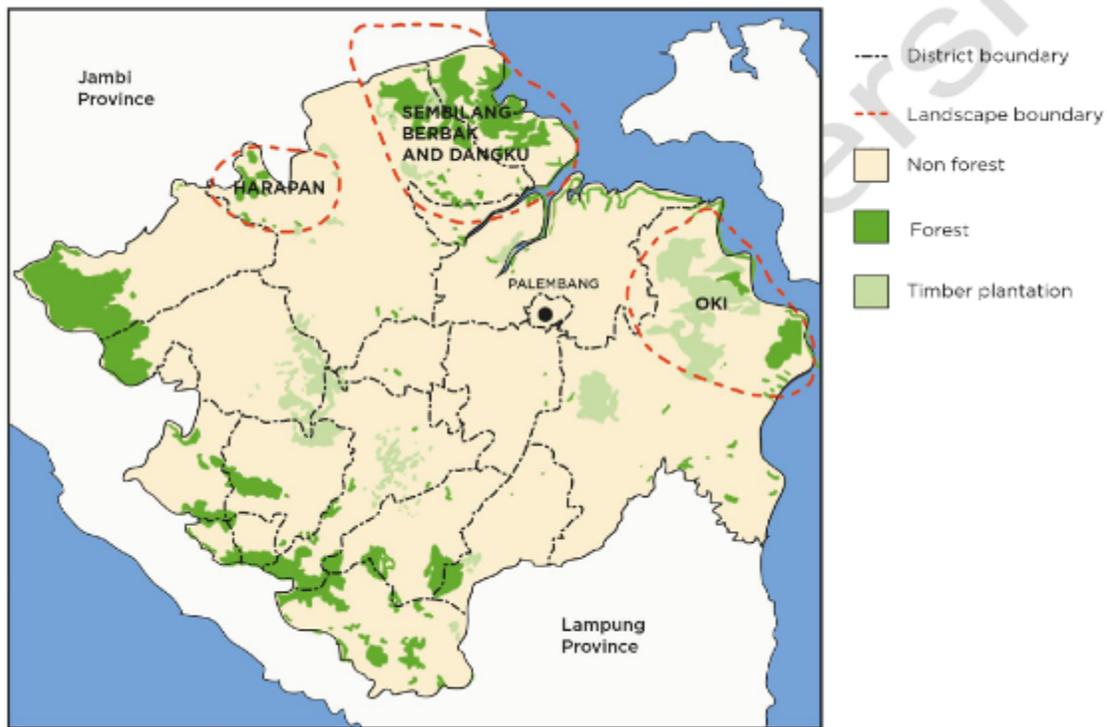
Forest and peat fires in South Sumatra and Jambi once again became an international level issue in 2015. These fires caused large scale loss of forest cover and once into the peat land, caused internationally significant levels of haze and CO2 emissions.

³³ Prodes, 2015

³⁴ AgroIcône 2016. All data for Cerrado and Amazon only.

³⁵ WWF, 2016

³⁶ AgroIcône, 2016



Source: Daemeter

Focus:

Initial mapping undertaken by Daemeter – in assignment of IDH – showed that the majority of the remaining natural forest is located in the Bukit Barisan range in the far west and south of the province, and in Sembilang National Park in the northwest. The project’s initial focus of landscape intervention will be to the Sembilang National Park and its surroundings. The landscape is located in the districts of Musi Banyuasin and part of Banyuasin. Since 2016, the Sembilang National Park, characterized by large remaining mangrove areas, has been merged with the Berbak National Park, characterized by peat swamp and fresh water swamp forests, which is administratively located in the province of Jambi. Furthermore, another conservation area in South Sumatra, Hutan Harapan, also crosses the provincial border with Jambi. Therefore, the southern part of the Province of Jambi will be included in the project’s focus area. The project will also direct some attention to the Ogan Komering Ilir (OKI) district in South Sumatra, mainly due to the scale of fires and plantations on heavily degraded peat. At the same time, the world’s biggest pulp and paper plant will be built in this area placing heavy pressure for the development of sustainable plantations on a large scale. The selection of Sembilang as the primary focus point was based upon the level of remaining natural forest, the habitat significance for endangered endemic species, the high threats of fire, illegal logging and encroachment and the multi-commodity economic base. This area contains most of the key commodities for South Sumatra including plantation timber, palm oil, and rubber. The actual forest coverage against the figures of designated area in the three districts, OKI, Banyuasin, and Musi Banyuasin are presented below:

Status	Designated Area (Ha)	Actual Forest Cover (Ha)
Protection Forest	177,437	64,848
Production Forest	1,350,648	383,657
National Park	428,420	127,206
Other Land Use (APL)	2,458,595	82,759

Source: SK.866/Menhut-II/2014, digital data from Bappeda, Land Cover 2013

West Kalimantan:

West Kalimantan covers an area of 14.7 million ha. The Province has a number of significant waterways, the largest being the Kapuas river, which drains from inland wetlands such as Sungai Putri and Danau Sentarum. Port city Pontianak and other settlements in the province contain trading communities from a wide range of ethnic backgrounds within a cultural matrix dominated by the indigenous Dayak who make up 35% of the population. The communities including Dayak are mostly

dependent upon small scale agriculture and non-timber forest products such as honey and rubber. The natural forest within the province covers an area of about 9 million ha, with diverse ecosystems ranging from peat lands to coastal mangroves to forests – both on peat and mineral soils – over half of which is zoned for permanent production. Only 500,000 ha of the production forest designated for conversion remains, attesting to the rapid and significant expansion of estate crops within the Province. 2.3 million hectares of forest are zoned for protection and a further 1.4 million ha for conservation purposes within national parks, nature reserves and wildlife reserves. The estimated carbon stock remaining in these forests is 1,600 Giga Tons CO₂, over half of which is sequestered within Production Forest areas. Lowland tropical peatland covers an area of 1.7 million ha. Conversion of forest lands on peat soils to estate crops, community encroachment, illegal logging and the proliferation of fire have been significant factors in the high levels of GHG emissions from the Province to date.

Focus:

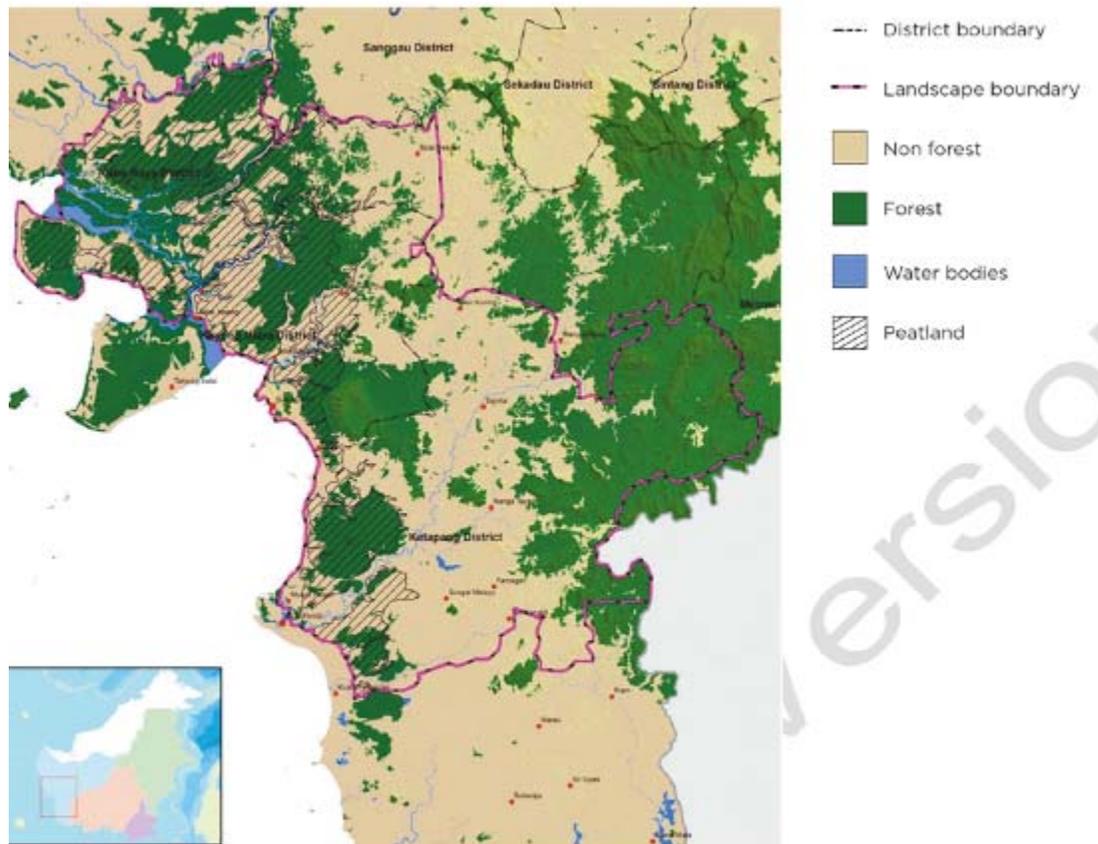
A scoping phase of the landscape in 2015, has led to a focus on the districts (kabupaten) of Kubu Raya, Kayong Utara and Ketapang Districts, which together encompass an area of 4.2 million hectares. 1.6 million ha is still covered by forest vegetation. Approximately, 1 million ha of the three districts consists of peat land. The area that is, based on these figures, under agricultural or mining production is approximately 2,277,906 ha.³⁷ Data about designated forest areas and actual forest cover in the three focus districts is presented below. In addition to the key threats to peat soils and forests mentioned above, a key issue in this landscape is the limited connectivity between remaining forest areas, threatening key species.

Status	Designated Area (Ha)	Actual Forest Cover (Ha)
Protected Forest	545,634	411,836
Production Forest	1,627,575	936,803
National Park	266,766	94,237
Other Land Use (APL)	1,795,339	208,205

Forest areas and cover in Ketapang, Kubu Raya, and Kayong Utara Districts in West Kalimantan. Source: SK Menhut No. 733/Kpts-II/2014 and forest cover 2014

As can be seen in the table, the majority of the remaining forest is located on land designated to some form of production – from agricultural land to different types of production forest. This signals the need to involve the private sector in order to be able to protect these areas.

³⁷ This is the APL area minus forest, and the production forest area minus forest. This does not take into account that non-forest covered parts of protected forests or national parks may already be under crop production.



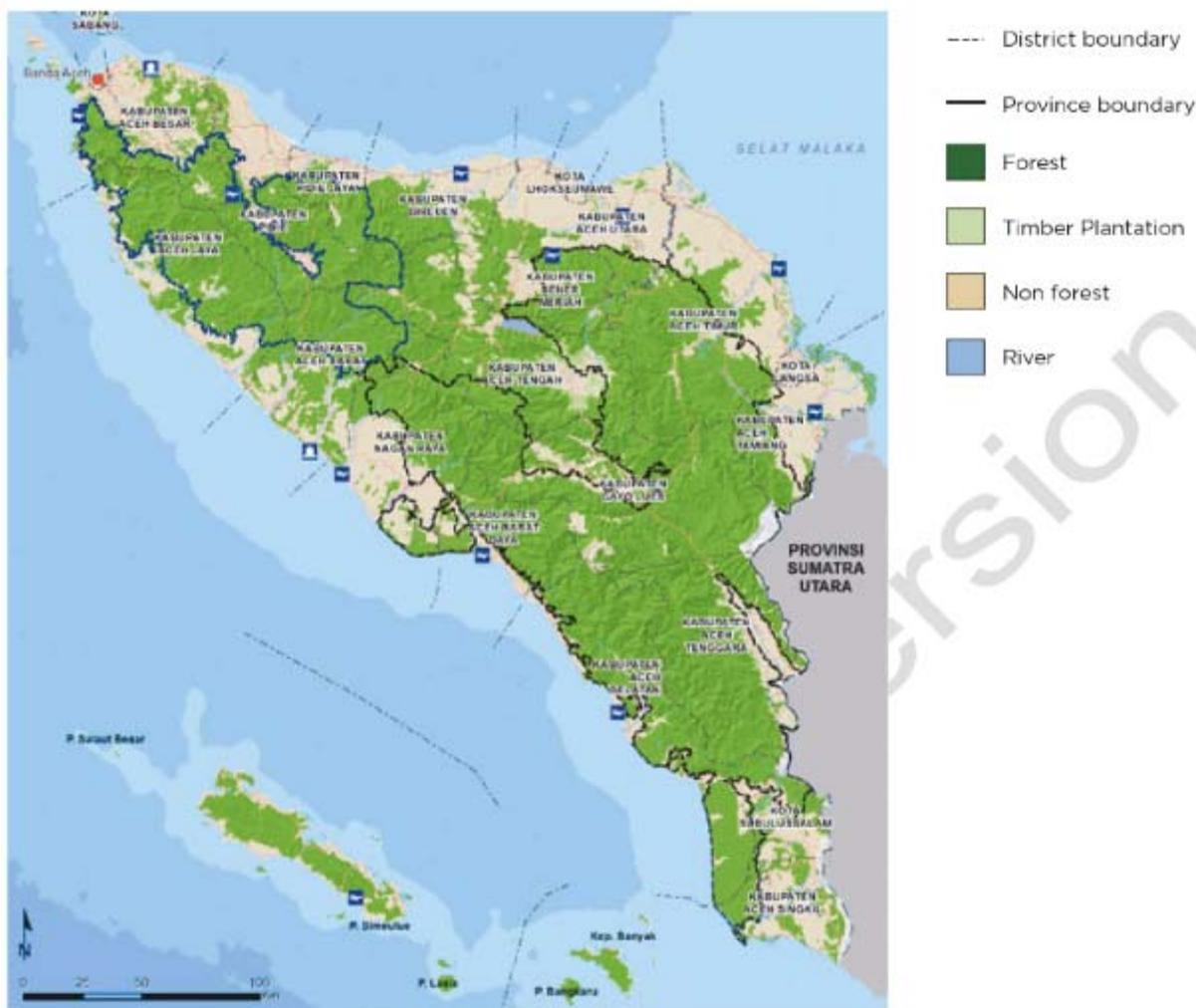
Forest cover and peat land in the three focus districts in West Kalimantan

Aceh

While historically an important trading province, Aceh's economic and agricultural development in postcolonial times was hindered by the ongoing separation war, which only came to an end following the 2004 tsunami. The post-conflict stability and the desire for rapid economic development in an area where poverty rates are higher than the national average are driving rapid expansion of the agricultural supply base.

International and local organisations have become increasingly concerned that this expansion has occurred at the expense of natural forests and in particular of the Leuser Ecosystem. The disbanding of the Leuser Ecosystem Management Body (BPCEL) and the most recent provincial spatial plan, which anticipates significant conversion of natural forests into other land uses has created further alarm. According to work commissioned by IDH, Aceh remains 56% forested (3.2 m ha) – among the highest in Indonesia. Between 1996 and 2013, Aceh lost 10% of natural forests. Of the remaining 3.2 m ha of forest, 2.6 m sits within the Leuser or Ulu Masem Ecosystems. 240,000 ha of this area are zoned for development under the new spatial plan.

The geographic, agri-economical and political situation of Aceh is different from the other landscapes under the proposed project. Geographically, unlike in West Kalimantan and South Sumatra, mountains and highlands dominate the province. As such, the type of crops and the scale and method in which they are cultivated are different. Economically, in palm oil and forestry, large scale plantations are a relatively recent phenomenon, and few of the larger company groups have concessions in the province. Instead, most of the large processors rely on third party suppliers. In palm oil for instance, while three of the six IPOPOP companies purchase oil from Aceh for use in their refineries in North Sumatra, only one (Astra Agro Lestari) has concessions in the province, while the others rely completely on third party suppliers. In addition, transmigration-based plasma schemes seen elsewhere in Sumatra are not common in Aceh. Processing facilities for a variety of crops including palm oil, aquaculture and cocoa are absent from the province, and much of the raw materials from Aceh are sent to Medan for processing. As national level policy may be interpreted or applied differently in Aceh, and as such engagement with local politicians is perhaps even more critical than in the other provinces.



Source: Daemeter

Forest cover map Aceh (2013)

Focus:

In Aceh, the project is proposing to focus on specific areas with the kabupatens (districts) of Aceh Tamiang and Aceh Timur with the objective of avoiding deforestation with the Leuser Ecosystem (as defined by the original BPKEL boundary). Together, the two districts cover 770,000 ha (Aceh Timur 546,000 ha and Aceh Tamiang 215,000 ha), of which 340,000 ha is forested area within the Leuser Ecosystem. Palm Oil is by far the most dominant agricultural industry in the two districts. Other commodities in the two districts include rubber, beef, aquaculture, cocoa and coffee. Regional investment and spatial planning indicate that further development of forest land both within and outside of the ecosystems is expected. 28,500 ha has been allocated for oil palm development under the current spatial plan, and there is 3,000 ha of unlicensed oil palm development ongoing within the Leuser Ecosystem.

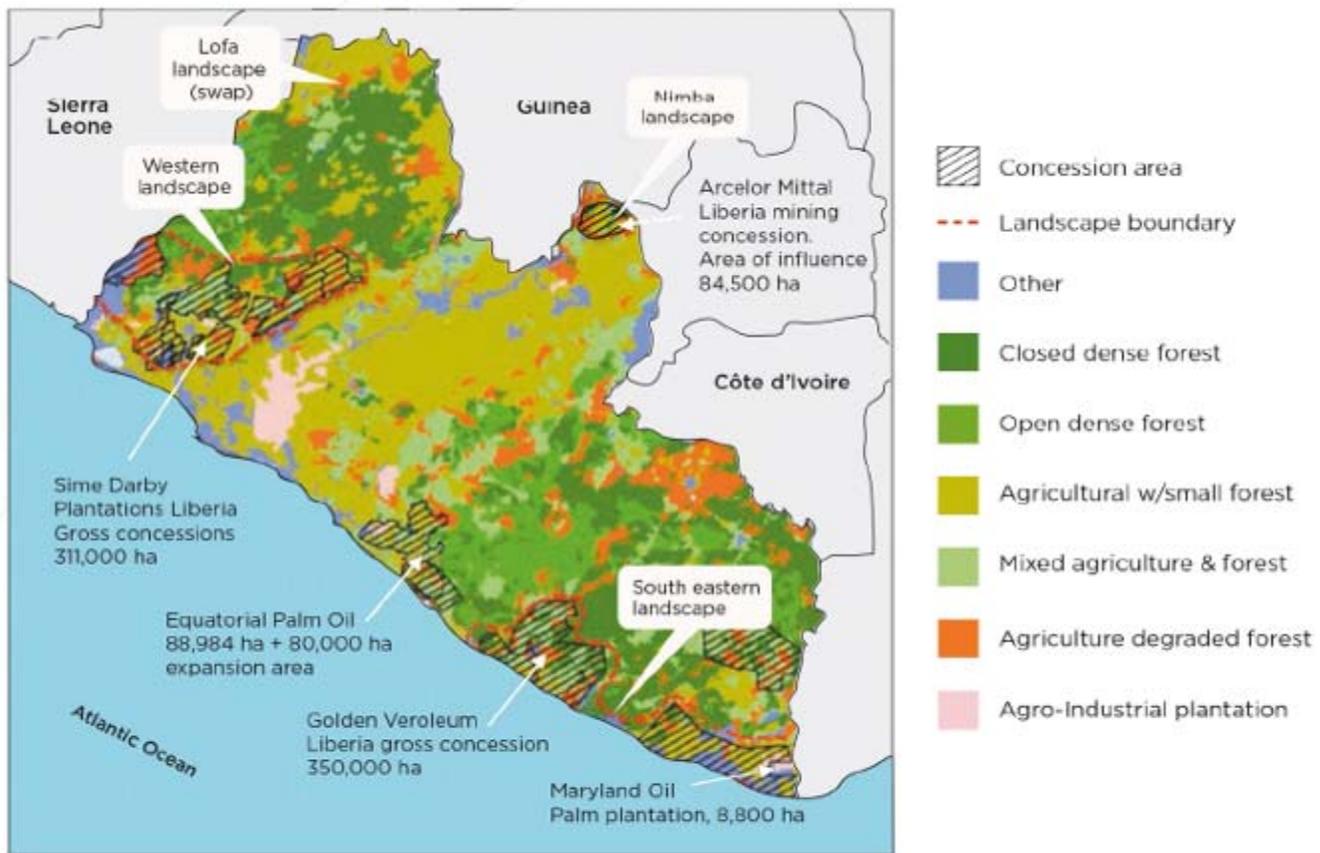
Liberia

In Liberia, the project is focusing on three geographies that are of particular high-risk to be deforested through production growth. Aim is to proof the production protection inclusion approach by investing in an integrated landscape, providing

incentives for investments into crop production, which result in opportunities to communities and economic growth within the landscape whilst maintaining the integrity and quality of the forest.

The landscapes are centered on concessions because the concession-holding companies are the main agents of change. The scale of land use investment and activity generated by these companies means that land use change will happen most quickly, and most certainly, but that they also have unprecedented influence on protection of the same forest. These areas include:

- Nimba: The iron-ore mining concession held by Arcelor Mittal Liberia (AML) in the north east of the country with an area of 84,500 hectares relevant to its offset biodiversity conservation program;
- The agricultural concession of Golden Veroleum Liberia (GVL) in south east Liberia, a gross concession area of 350,000 hectares, for oil palm plantation. Conversations have been initiated with the two neighbouring concession holders next to GVL in the South East, namely Maryland Oil Palm Plantation (MOPP) and Equatorial Palm Oil (EPO), to explore if investment in community oil palm can be an important enabler of forest conservation in these concession areas as well;
- The agricultural concessions of Sime Darby Plantation Liberia (SDPL) in north west Liberia, a gross concession area of 311,000 hectares, predominantly for oil palm and rubber plantation.



Source: Adapted from maps produced by Fauna & Flora International

Landscape areas (marked by red dotted line) in Liberia.

The South East Landscape

The landscape in south east Liberia is centered on the palm oil concession held by Golden Veroleum Liberia (GVL). The area stretches over four counties: River Cress, Sinoe, Grand Krua and Maryland and River Cree.

The landscape borders Sapo National Park, Liberia’s largest protected area and the only current Protected Area intended for strict nature conservation. Sapo covers 180,400 ha and is the remaining block of tropical lowland rainforest in West Africa (after Tai National Park in Cote d’Ivoire). Unlike Sime Darby’s concession in the West, the land ceded to GVL had no previous large-scale agricultural plantations.

South-east Liberia is relatively sparsely populated with an estimated 363,000 people in 2008 (source: LISGIS), and the majority of people live in the main county towns. Nonetheless there is a significant population estimated of around 100,000 people

within the concession area living in small settlements who are highly dependent upon the land and forest for subsistence. Socio-economic statistics describe the residents of the south east as being particularly dependent upon natural resources. Also, as the road from Monrovia to Sinoe and Grand Kru is in poor condition, the area is difficult to reach in the rainy season especially.

Besides GVLs concession and with the landscape, there is the palm oil and rubber concessions run by Maryland Oil Palm Producers (MOPP). MOPP, has a total concession of 15,000 ha, and by 2012 had rehabilitated 1,500 ha of former rubber plantation and planted 500 ha of new palm oil (ADB, 2012). Immediately adjacent to the most westerly of GVL's concession blocks is the palm oil concession of 89,000 ha, awarded to Equatorial Palm Oil (EPO). This concession includes former palm oil plantation and already has 10,000 ha under production. EPO's concession includes a further 88,000 ha "expansion area", subject to it securing agreement from communities.

GVL was granted a Gross Concession Area of 350,000 ha, and is entitled to plant up to 220,000 ha of oil palm, plus a further 40,000 ha under an outgrowers program. The concession agreement was signed in 2009 and runs for 65 years with an option to extend the term by a further 33 year (Ministry of Foreign Affairs, 2010).

The Western Landscape:

In western Liberia, the proposed landscape is centered on the palm oil and rubber concession area held by Sime Darby. This lies in the south-west corner of the country, towards the border with Sierra Leone and extends to an area of 311,187 ha across four counties: Grand Cape Mount, Bomi, Bong and Gbarpolu.

Forest cover within and around the concession area is dense. For example, a survey of Bopolu District, which is within Gbarpolu County where around half of the concession land is located, found that 40% was closed forest (>40% canopy cover), 49% was closed-to-open forest (>15%), and the remaining 11% was cropland or developed (bare) land (Evans and Griffiths, 2013).

Three Protected Areas (or proposed protected areas) lie adjacent to the concession area. To the North-West is Gola National Park (88,000 ha), which unites with the Gola Rainforest National Park in Sierra Leone (75,000 ha) to form the Transboundary Peace Park. North east is the Kpo mountains proposed protected area. Immediately south of the concession is the Lake Piso protected area. This is a coastal, multi-use reserve, and was the site of a REDD+ demonstration project funded by NORAD and implemented by FFI.

The landscape includes a complex mix of community land use for farming, hunting and other subsistence uses; local commercial agriculture, other concessions for forestry and mining. It includes substantial areas of dense rainforest and is surrounded by protected areas and proposed protected areas.

Communities in the gross concession largely rely on land within the concession for food and livelihoods. As in most of Liberia, the agriculture is small-scale, family-based shifting agriculture with a mix of crops for consumption and cash.

Sime Darby's concession agreement was signed in 2009 and runs for 63 years. The gross concession area is 311,187 ha, within which the company is entitled to identify a 220,000 ha "Concession Area" plus 44,000 ha for an outgrowers program (Ministry of Foreign Affairs, 2009).

The Nimba Landscape:

The landscape is centered on the Arcelor Mittal mining concession, which is located in the northern point of Nimba county bordering Guinea and Ivory Coast. The Nimba mountain range dominates the area and is a protected area, because of its unique montane ecology. In and around the concession there is dense forest, including a second (proposed) Nature Reserve and several community forests. Compared to the palm oil landscapes previously described, this is a small area of approximately 125,000 ha and a population of 30 – 40,000.

Within the concession area, the main land use is shifting agriculture, particularly for rice and other subsistence crops. The land on the southern part of the landscape and around Saniquelle features more intensely produced lowland rice and smallholder rubber farms. The mine is the major employer but still only a small proportion of the population are formally employed, the rest living off trading subsistence farming, hunting and other subsistence activities. Dependence upon the land and forest for food and livelihoods is therefore high. Levels of poverty are also high and infrastructure and services are limited.

The terms of their concession do not require AMG to offset or in some other way compensate for its impacts, but they are following the IFC standards and their own policy of conservation. This policy is to compensate for the residual adverse impacts to biodiversity resulting from the company's operations. The policy is being achieved under the Company's Biodiversity Programme through enhanced protection of existing protected areas (such as the East Nimba Nature Reserve); support for

sustainable management of surrounding forests and agricultural intensification to improve food security and reduce people's dependence on forest resources.

The BCP is financed at around US\$ 0.8 million per annum and is implemented through CI, FFI and several Liberian NGOs, as well as in-house. The main elements of this program are implementation of the East Nimba Nature Reserve management plan, conservation agreements with communities exploiting forest in and around the ENNR, support for community forests in the area and developing alternatives to shifting agriculture.

There are three 'Community forest' in the landscape, owned and managed by the Gba, Blei and Zor people. These amount to approximately 15,000 ha and contain the vast majority of the HCV that remains outside of the nature reserve. The Gba community forest especially is of high quality and was formerly the proposed West Nimba Nature Reserve.

For management of the East Nimba Nature Reserve, the programme is working with the Co Management Committee to implement the Management Plan that was finalized by FFI in 2014. The land of ENNR is publicly owned by the Government of Liberia and managed by the Co-Management Committee (CMC) under sanction of the Forestry Development Authority (FDA). Except for the East Nimba Nature Reserve, and the three CFs of Gba, Zor and Blei, the surrounding land is claimed by local communities as they are the custodians of the areas, over which they have customary rights.

Currently, nine "project affected communities" around the East Nimba Nature Reserve (ENNR) are involved in conservation activities sponsored by Arcelor Mittal and approximately 25 communities are carrying out land uses such as farming and hunting which directly impact upon the forest in the nature reserve or surrounding landscape.

Thus around 25% of the landscape area is covered with HCV forest and is managed as either nature reserve or community forest although in reality protection is still an ongoing challenge in some areas (e.g. Gba and Zor community forests). Approximately 100,000 ha is used for shifting agriculture and is therefore a mosaic of secondary forest, fallow (regenerating areas) and worked farms. In general this is highly degraded although it still contains some HCV forest and much of it will be high value in terms of carbon stock forest.